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ABSTRACT

Thirty undergraduate students were asked to read and recall information presented in one of two parallel expository passages about the professional athlete. These passages differed only in their use of the "he" or "she" generic referent. The passages were parsed into 19 idea units, and 5 target words in each conveying the generic and conceptual perspective of the passage were selected. Each subject's written recall protocol was scored for the presence or absence of the 19 idea units. No significant difference was found in the number of idea units recalled for the "he" and "she" treatment groups. Protocols were also scored for the presence or absence of altered and unaltered target words. Subjects' target word scores demonstrated a significant difference in the number of altered target words for the "she" passage group, demonstrating a shift in the intended passage perspective from generic to sex-specific. (Author/HTH)

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Perspective Shift in Adult Readers: The Effects of the Generic on the Recall of Expository Text

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Perspective Shift in Adult Readers: The
Effects of the Generic on the Recall of Expository Text

While the generic pronoun has been and still remains a pervasive linguistic form there has been little systematic investigation of its potential effects on the cognitive processing of information. What literature is available on this topic of the generic form focuses primarily on the political rather than cognitive ramifications of this common language pattern. It would appear from the writings of Carney (1977) and Lakeoff (1973) that the concern over sex-bias permeates many areas including that of the comprehension of discourse, where it encompasses the consideration of language patterns that might foster inequality in rather subtle ways. As noted by Carney (1977), language serves to shape thought as well as to reflect it, and sexist language, even the most subtle variety, may express and reinforce the limited conceptions of and opportunities for female persons.

One of the most common examples of linguistic subtlety present in written and oral discourse is the use of the generic "he." Lakeoff (1973) has even argued that the application of the male pronoun to denote unmarked or unspecified referents reinforces the invisibility of women and may suggest a sense of male authority. Such a claim, however, demands empirical examination. Indeed, words whether written or spoken are powerful instruments in thought conveyance, and while words do not form our thoughts they do succeed in transforming them (cf. Huttenlocher, 1976; Macnamara, 1977). Consequently, when we choose one word or language pattern over another, as in the instance of the generic "he," we tend to evoke one image over another or one concept over another (e.g., Anderson & Shifrin, 1980; Anderson, Stevens, Shifrin, & Osborn,

1978; Olson, 1977). While there have been attempts in formal writing to generate alternate ways of signaling the presence of an unspecified referent other than the use of the generic "he," such attempts have done little to dissuade the popular use of this linguistic pattern. Yet, we know relatively nothing of the potential effects of the generic form on the cognitive processing of information. The sheer commonality of this language pattern would seem to warrant its investigation.

It is surprising that the acquisition and effects of the generic form that is pervasive in our oral and written language is neither well researched nor well understood. For example, Gunderson (1976) stated that "...we do not know when or where children hear or listen to use it [generic 'he']. It may be a part of the causal language of children, or it may be a feature of school language" (p. 305-306). Regardless, it would appear that as children learn to linguistically distinguish between the sexes through the selection of an appropriate sex-related pronoun they are introduced to what must seem to be conflicting information. They are introduced to the generic "he" which, they are told, might be used to represent male persons, but which oftentimes may be used to represent an unspecified referent which may be either male or female. This new information initially fails to conform to the child's prior understanding of the sex-specific nature of pronoun usage, creating the opportunity for linguistic and conceptual ambiguity. Further, the increased occurrence of the generic seems directly aligned to the increase in the amount of expository material encountered by the reader/listener in the course of the schooling experience. Yet, educators frequently assume that students in varying stages of cognitive development and at various levels of reading/listening proficiency have

the capabilities to handle the rather subtle linguistic distinctions required of the generic pronoun. There have been recent investigations into the nature of discourse processing that bring into question such an assumption.

Black, Turner and Bower (1979), for example, argued that the inferential thinking that renders a piece of text comprehensible comes about through the maintenance of a consistent point of view or perspective. Invoking the generic form over the sex-specific may be a means of invoking or priming a particular perspective with regard to that textual material. It is this process of referential constraint that is termed instantiation (e.g., Anderson, Pichert, Goetz, Shallert, Stevens, & Trollip, 1976; Anderson & Shifrin, 1980; Anderson et al., 1978). As Anderson & Shifrin (1980) noted "a message is only a cryptic recipe for the construction of meaning" (p. 333) and it is only through the addition of the reader's/listener's own knowledge of the world within the bounds set by context that understanding is achieved. However, instantiation and consequently the perspective and comprehension to which it leads are by no means a flawless systems. In the case of generic form usage the contextual sensitivity required in the instantiation of word meanings may be intensified especially for the younger, less proficient reader less accustomed to the alternate, gender-unspecified use of sex-specific pronouns. Consider the following sentence:

> The child should be in his classroom by 8:15 or he will be marked tardy.

While contextual clues are present within the sentence, ambiguity regarding the instantiation of "child" may remain. Would the image of "child" be altered, for example, if such a sentence appeared in a handbook for a military school, in a memo for embroidery classes or in a letter to a

mother about her frequently tardy youngster? It would appear that the presence of the generic form may put added stress on the contextual framework in which it appears. When no clear contextual clue to the referent is available to the reader/listener the application of the generic pronoun may produce conceptual ambiguity. For the sentence given, it would seem that in the absence of additional textual information or without the intervention of prior knowledge or experience, the image invoked for the child would be that of a male. Even the added information that the sentence was presented in the generic form may be inadequate to interfere with the male child perspective primed by the presence of the "he", "his" pronouns. All these questions are in need of empirical investigation. It is the purpose of the present study to examine two questions with regard to the use of the generic form. First, what is its effect on the gist recall of expository text and second, what is its effect on the maintenance of the generic perspective intended by the text.

Method

Subjects

Thirty undergraduates enrolled in two introductory reading methods courses at the University of Maryland were the subjects for this study. Subjects were randomly assigned to one of two treatment groups - the "he" passage group, and the "she" passage group.

Materials

Two parallel passages on the topic of the professional athlete were developed for use in this study. Each passage contained 175 words, and differed only in the sex-specific nouns and pronouns each contained. Two experienced judges parsed the passages into 19 idea units and were in

agreement on 95% of the individual idea units. Differences were resolved in conference. An idea unit is defined as "...a single, meaningful piece of information conveyed by the passage, whether it consisted of a word, a definition, or a phrase in the passage" (Meyer, 1977, p. 315).

The "he" passage appears below:

The Professional Athlete

In the world today, the professional athlete has reached an all-time high in his level of public acclaim. It frequently appears as if the athletic superstar is considered more of a hero by his viewing public than his counterparts in the fields of politics, education, and medicine. But who is this professional and what are his contributions to mankind? Has he ever produced a cure for disease; has he ever resolved a national crisis; or has he ever formulated a new theory that stimulated the minds of men? Yet, the public seems far more in awe of the man who holds an official sports' record than the man who unravels the causes or cures for a serious disease. The public is far more likely to identify the face of a professional sportsman and recount his achievements than they are to identify the chairman of one of the world's most powerful conglomerates whose decisions have a direct bearing on the nation's economic stability.

The "she" passage appears below:

The Professional Athlete

In the world today, the professional athlete has reached an

all-time high in her level of public acclaim. It frequently appears as if the athletic superstar is considered more of a heroine by her viewing public than her counterparts in the fields of politics, education and medicine. But who is this professional and what are her contributions to womankind? Has she ever produced a cure for disease; has she ever resolved a national crisis; or has she ever formulated a new theory that stimulated the minds of women? Yet, the public seems far more in awe of the woman who holds an official sports' record than the woman who unravels the causes or cures for a serious disease. The public is far more likely to identify the face of a professional sportswoman and recount her achievements than they are to identify the chairwoman of one of the world's most powerful conglomerates whose decisions have a direct bearing on the nation's economic stability.

The development of two parallel passages, one of the "he" generic form and one of the "she" generic form, on a topic of the professional athlete was determined on the basis of several factors. First, the subjects employed in the investigation were adult readers enculturated with regard to the generic "he" form but unfamiliar with the less conventional "she" generic form. The application of the two passages, it was reasoned, would allow for the explicit comparison of recall effects between the familiar and unfamiliar generic forms. Second, the topic of the professional athlete was selected because of its largely male orientation. Therefore, it was hypothesized that subjects receiving the "he" passage would maintain the generic perspective of the passage

and experience no difficulty at the gist level of recall as a result of their familiarity with the linguistic pattern. By comparison it was hypothesized that subjects receiving the "she" passage, as a result of their unfamiliarity with the linguistic form and the generally male-orientation of the topic, would experience some difficulty in maintaining the primed perspective of the passage and might consequently exhibit some difficulty at the gist level of recall as well.

Two judges, doctoral students in reading education, selected those words in the "he" and "she" passages that conveyed the conceptual and generic nature of each passage. There was 100% agreement on the selection of the five target words. These target words are displayed in Table 1.

Insert Table 1 about here

The identification of these target words was undertaken by the researchers for the measurement of the maintenance or shift in readers' perspective from that intended by the passage. The researchers hypothesized that a significant difference in unaltered target words would be found between the "she" and "he" passage groups both in an immediate and delayed recall task. This hypothesis was based on the belief that those subjects receiving the "he" passage would be more apt to maintain the male generic perspective primed by the passage while those receiving the "she" generic passage would tend to experience a shift in perspective from the generic to the sex-specific.

Each subject was presented with a set of materials, in booklet form, containing directions for the task, one of the two treatment passages, an intervening arithmetic computation activity, and pages on which to

write the information recalled.

Procedures

Subjects in the "he" and "she" passage groups were told by the investigators that they were participating in a study concerned with how people think about and remember what they read. They were directed to read the enclosed passage silently and then wait for further instructions before turning the page. All subjects had completed the reading within two minutes after which they worked the intervening math task. The subjects were then instructed as follows:

> Please write down as much of the exact passage as you can on these sheets of paper. If you cannot remember the exact words of any sentence, but you do remember the meaning, write down a sentence or part of a sentence as close to the original as possible.

After completion of the written recall protocols, subjects were told that they had completed the first phase of the study, and that they would receive additional instructions at some later time. In order to acquire accurate results, the subjects were also directed not to discuss the study with anyone until they were debriefed. One week later subjects were given the same instructions for the recall task as they had received previously. At the conclusion of the experiment a debriefing questionnaire was completed by each subject.

Scoring

Each recall protocol was scored by two independent raters for the presence of altered and unaltered target words. Target words were scored as altered if they reflected a change in the generic

nature of the word making it sex-specific (i.e., athlete to woman athlete or male athlete). Altered target words were given the value of -1 and unaltered target words were scored at +1. Interrater reliability was .98. The single discrepancy was submitted to a third scorer for final ruling.

Each recall protocol was then scored for the presence or absence of the 19 idea units by two independent raters. If the idea unit was expressed in the protocol, whether in same form or paraphrase, the number of the idea unit was registered as recalled. Interrater reliability was .97 with discrepancies in scoring submitted to a third rater for final judgment.

Results

The first question addressed by this study was what effect the presence of the generic "he" and "she" forms would have on the recall of expository text at the gist level. As indicated by the means and standard deviations for the number of idea units recalled as displayed in Table 2, no significant difference was found in the number of idea units recalled for the "he" and "she" groups for either the immediate, $F_{(1,28)}=.04$, $p>.05$, or delayed-recall tasks, $F_{(1,28)}=2.35$, $p>.05$. The data were analyzed by means of a one-way ANOVA. It would appear that the presentation of material in the familiar "he" or unfamiliar "she" generic form does not have the hypothesized effect on gist-level recall for this study.

Insert Table 2 about here

The second question posed by this study was what effect the use of the generic "he" and "she" would have on the maintenance of the generic perspective intended by the text. Data subjected to a one-way ANOVA demonstrated a significant difference in the target word scores for the "he" and "she" passage groups for both the immediate, $F_{(1,28)}=6.6$, $p<.025$, and the delayed-recall tasks, $F_{(1,28)}=13.93$, $p<.001$. The means and standard deviations for target word scores for the "he" and "she" passage groups are displayed in Table 3.

Insert Table 3 about here

As the data on the frequency of altered and unaltered target words for immediate and delayed-recall tasks demonstrate in Table 4, only one target word out of the 57 given in recall protocols of the "he" passage group was altered. This is less than 2% altered words for the "he" passage group. However, for the "she" passage group, a total of 18 out of 41 target words listed in the recall protocols, or approximately 44%, were altered to sex-specific. Clearly, those subjects receiving the "she" passage shifted from the intended generic perspective to a sex-specific one significantly more often than their "he" passage counterparts.

Insert Table 4 about here

Discussion

The central focus of this study was to ascertain the effects of the generic pronoun pattern on the recall of expository text. Specifically,

the researchers set out to empirically investigate the effect of a familiar and unfamiliar generic form on the gist-level recall of expository material and to examine the maintenance of the intended generic perspective for "he" and "she" passage groups. It had been assumed that concept ambiguity, arising from unfamiliarity with the "she" generic form and from the largely male orientation of the passage topic, would produce a significant difference in the total recall score of the "she" passage group as determined by idea unit recall. Total idea unit recall failed to support this hypothesis. It is worth noting that the mean number of idea units recalled out of the possible 19 was quite modest for both passage groups even for the immediate recall task. Such results suggest the need to examine the effects of the generic pattern on gist-level recall with alternate expository passages that may be more memorable to adult readers.

The present study also set out to investigate perspective shift. For this purpose target words were identified which conveyed the generic essence of the written passages. Any alterations in the passages' target words from the generic to the sex-specific would be conceived as evidence of the variance in passage perspective. The significant difference for the unaltered targets words between the "he" and "she" passage groups for both the immediate and delayed recall tasks provides clear evidence of the shift in passage perspective, and lends support to the potential of concept ambiguity for information processed under an unfamiliar generic pronoun framework.

In this particular study it would appear that subjects were well-versed in the use of the generic "he" pronoun pattern. As a consequence of the internalization of this language pattern, the presence of the "he" generic

in written discourse did not have a disruptive effect on the processing of information.

One limitation of the present study that needs to be addressed is its presentation of information in a contrived "she" generic framework. While it can be argued that the generic "she" is an artificial language pattern, it should be noted that the generic "he" pattern is an equally contrived system which becomes enculturated and internalized by the reader/listener. It is prior to the internalization of this contrived system that concept ambiguity might well exist as a disruptive force in the processing of information. Through the application of the "she" generic the presence of concept ambiguity can be investigated with populations already proficient in the generic "he" pronoun.

Still unanswered is the question of whether for young children accustomed to the sex-specific nature of pronoun usage concept ambiguity results from the introduction of the generic pronoun. Such questions should serve as the basis for futher studies. It would also serve to test for the effects of the generic pronoun on the recall of orally presented materials with young children who have not acquired the skills of reading. Further testing with various types of written materials would be needed, as well, to confirm the results of this investigation. Only through such replication can it be surmised that the findings presented here are not specific to the passages on which they are based. It seems vital that the systematic investigation of this pervasive language pattern continue so as to undestand better the potential effects of the generic form on information processing.

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Table 1

Target Words for the "He" and "She" Passages

Groups	Target Words
He	athlete
	sportsman
	hero
	chairman
	mankind
She	athlete
	sportswoman
	heroine
	chairwoman
	womankind

Table 2

Means and Standard Deviations for Idea Units Recalled for the "He" and "She" Passage Groups

Groups	Recall Protocols			
	Immediate		Delayed	
	M	Sd	M	Sd
He (n=15)	4.53	2.03	2.73	1.69
She (n=15)	4.13	1.59	1.8	1.47

Table 3

Means and Standard Deviations for Target Word Scores for the "He" and "She" Passage Groups

Groups	Recall Protocol			
	Immediate		Delayed	
	M	Sd	M	Sd
He (n=15)	2.13	1.02	1.6	1.4
She (n=15)	.53	2.09	-.27	1.24

Table 4

Frequency of Altered and Unaltered Target Words for the "He" and "She" Passage Groups

Groups		Recall Protocols	
		Immediate	Delayed
He (n=15)	Altered	0	1
	Unaltered	31	25
She (n=15)	Altered	9	9
	Unaltered	18	5